

WHAT IS CLAIMED IS:

1. An information delivery system comprising an information delivery apparatus and a receiver apparatus, in which information is automatically pushed from said information delivery apparatus to said receiver apparatus, said information delivery apparatus comprising:

program content storage means for storing the contents of a plurality of programs;

delivery information storage means for storing delivery information corresponding to each of said plurality of programs;

information delivery control means for selecting a program for current delivery from said plurality of programs, and for generating program information data and delivery schedule information data, said program information data including the contents of the selected program and said delivery schedule information data including the delivery information of the selected program;

broadband transmitter means for transmitting said program information data and said delivery schedule information data via a broadband communication path; and

narrowband transmitter means for transmitting said delivery schedule information data via a narrowband communication path;

said receiver apparatus comprising:

broadband receiver means for receiving said program information data and said delivery schedule information data transmitted via said broadband communication path;

narrowband receiver means for receiving said delivery schedule information data transmitted via said narrowband communication path;

information retrieval control means for retrieving as desired said program information data received by said broadband receiver means with reference to said delivery schedule information data received by either said broadband receiver means or said narrowband receiver means;

received data storage means for storing the retrieved program information data and said delivery schedule information data; and

display means for displaying, under the control of said information retrieval control means, information in accordance with the retrieved program information data stored in said received data storage means.

2. An information delivery system according to Claim 1, wherein said delivery information of the selected program includes program name, time of delivery, channel designation information if a plurality of channels are available in said broadband communication path, delivery status as to whether

the selected program is to be transmitted for the first time, priority level, and type and size of the contents of the selected program.

3. An information delivery system according to Claim 1, wherein said delivery schedule information data includes, in addition to the delivery information of the selected program, the delivery information of at least one of said plurality of programs scheduled for subsequent delivery, whereby the delivery schedule information data serves as reservation information data which is used for program reservation setting in said receiver apparatus.

4. An information delivery system according to Claim 1, wherein said narrowband transmitter means receives a request for said delivery schedule information data from said receiver apparatus and forwards said request to said information delivery control means, and in response to said request, said information delivery control means generates said delivery schedule information data, and said narrowband transmitter means transmits said delivery schedule information data to said receiver apparatus.

5. An information delivery system according to Claim 1, wherein said information delivery apparatus further

comprises browser program storage means for storing at least one browser program for reading the contents of said plurality of programs, said information delivery control means generating said program information data including one of said at least one browser program corresponding to the selected program in addition to the contents of the selected program.

6. An information delivery system according to Claim 5, wherein said at least one browser program includes sufficient software which allows contents of any of said plurality of programs and said delivery schedule information data, transmitted from said information delivery apparatus, to be displayed on said display means of said receiver apparatus.

7. An information delivery system according to Claim 1, wherein said display means displays said delivery schedule information data, said information delivery control means reserves at least one program, as selected based on said delivery schedule information data displayed on said display means, which is scheduled for subsequent delivery by said information delivery apparatus, thereby having said broadband receiver means receive only said at least one program which has been reserved, and said broadband receiver

means receives only said at least one program which has been reserved.

8. An information delivery system according to Claim 1, wherein when said delivery schedule information data fails to be properly obtained via said broadband communication path, said information retrieval means generates a request for said delivery schedule information data and forwards said request to said narrowband receiver means, said narrowband receiver means transmits said request to said information delivery apparatus, receives said delivery schedule information data transmitted from said information delivery apparatus, and forwards said delivery schedule information data to said information retrieval control means.

9. An information delivery system according to Claim 5, wherein said information retrieval means, if a browser program received by said broadband receiver means has been updated from a browser program stored in said received data storage means, overwrites the browser program stored in said received data storage means with the browser program received by said broadband receiver means.

10. An information delivery system according to Claim 5, wherein said receiver apparatus further comprises writing

means for writing the program contents and the browser program, stored in said received data storage means, to a predetermined type of information storage medium, said information retrieval control means controlling said writing means so that the program contents and the browser program stored in said received data storage means are written to said predetermined type of information storage medium while maintaining the directory structure of the program contents and the browser program.

11. An information delivery apparatus which for an information delivery system and which automatically delivers information, said information delivery apparatus comprising:
program content storage means for storing the contents of a plurality of programs;

delivery information storage means for storing delivery information corresponding to each of said plurality of programs;

information delivery control means for selecting a program for current delivery from said plurality of programs, and for generating program information data and delivery schedule information data, said program information data including the contents of the selected program and said delivery schedule information data including the delivery information of the selected program;

broadband transmitter means for transmitting said program information data and said delivery schedule information data via a broadband communication path; and

narrowband transmitter means for transmitting said delivery schedule information data via a narrowband communication path.

12. A receiver apparatus for an information delivery system and which receives information, said receiver apparatus comprising:

broadband receiver means for receiving program information data and delivery schedule information data transmitted via a broadband communication path from an information delivery apparatus;

narrowband receiver means for receiving said delivery schedule information data transmitted via a narrowband communication path from said information delivery apparatus;

information retrieval control means for retrieving as desired said program information data received by said broadband receiver means with reference to said delivery schedule information data received by either said broadband receiver means or said narrowband receiver means;

received data storage means for storing the retrieved program information data and said delivery schedule information data; and

display means for displaying, under the control of said information retrieval control means, information in accordance with the retrieved program information data stored in said received data storage means.

13. An information delivery method, in which information is automatically pushed from an information delivery apparatus to a receiver apparatus, said information delivery method comprising the steps of:

said information delivery apparatus:

storing the contents of a plurality of programs and delivery information corresponding to each of said plurality of programs;

transmitting program information data including the contents of one of said plurality of programs, and delivery schedule information data including the delivery information corresponding to the program via a broadband communication path; and

transmitting, as required, said delivery schedule information data via a narrowband communication path;

said receiver apparatus:

receiving said program information data and said delivery schedule information data transmitted via said broadband communication path;

receiving said delivery schedule information data

transmitted, as required, via said narrowband communication path;

storing said program information data and said delivery schedule information data; and

displaying information in accordance with said program information data and said delivery schedule information data.

14. An information delivery method according to Claim 13, further comprising the steps of:

said receiver apparatus:

reserving at least one program, as selected based on the displayed delivery schedule information data, which is scheduled for subsequent delivery by said information delivery apparatus; and

receiving only said at least one program which has been reserved, and said broadband receiver means receives only said at least one program which has been reserved, transmitted via said broadband communication path.

15. An information delivery method according to Claim 14, wherein said delivery information includes the status of the corresponding program as to whether the program is to be transmitted for the first time, and said reserving step does not reserve any program which is not is to be transmitted for the first time.

16. An information delivery method according to Claim 14, wherein said reserving step determines priority levels regarding reception of said at least one program which has been reserved.

17. An information delivery method, in which information is automatically pushed from an information delivery apparatus to a receiver apparatus, said information delivery method comprising the steps of:

said information delivery apparatus:

storing, together with the contents of a plurality of programs, at least one browser program for reading the contents of said at least one program; and

transmitting predetermined information data including the contents of one of said at least one program and one of said at least one browser program corresponding to the program via a broadband communication path;

said receiver apparatus:

receiving said predetermined information data including the contents and the browser program, transmitted via said broadband communication path;

storing, in accordance with a predetermined directory structure, the contents, and the browser program if the browser program has been updated; and

displaying the contents using the browser.

18. An information delivery method for delivering product catalog information from an information delivery apparatus to a receiver apparatus, said information delivery method comprising the steps of:

electronically creating at least one product catalog information file of said product catalog information, including motion picture data and sound data;

generating a delivery schedule for delivering said at least one product catalog information file; and

transmitting said at least one product catalog information file and said delivery schedule so that said receiver apparatus is allowed to receive said at least one product catalog information file in accordance with said delivery schedule.

19. An information delivery method for delivering product catalog information from an information delivery apparatus to a receiver apparatus, said information delivery method comprising the steps of:

electronically creating at least one product catalog information file of said product catalog information, including motion picture data and sound data;

generating a delivery schedule for delivering said at

least one product catalog information file; and

transmitting said at least one product catalog information file and said delivery schedule so that said receiver apparatus is allowed to play back the motion picture data and sound data included in said at least one product catalog information file in accordance with said delivery schedule.

20. An information delivery method for delivering product catalog information from an information delivery apparatus to a receiver apparatus, said information delivery method comprising the steps of:

electronically creating at least one product catalog information file of said product catalog information;

generating a delivery schedule for delivering said at least one product catalog information file; and

transmitting said at least one product catalog information file and said delivery schedule via a broadband communication path while transmitting said delivery schedule via a narrowband communication path so that said receiver apparatus receives said at least one product catalog information file in accordance with said delivery schedule.